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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,814	02/13/2001	Sorin Surdila	1000-0204	2705
27902	7590	08/16/2004	EXAMINER	
ERICSSON RESEARCH CANADA 8400 DECARIE BLVD. MONTREAL, QC H4P 2N2 CANADA			SHAHRIER, SHARIF M	
			ART UNIT	PAPER NUMBER
			2664	

DATE MAILED: 08/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/783,814

Applicant(s)

SURDILA ET AL.

Examiner

Sharif M Shahrier

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/13/2001</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Barany (US 2002/0034166 A1).

Regarding claim 1, Barany teaches a media gateway control function (MGCF) (para. 0029, ln. 1-4) module to convert between packet-switched and circuit-switched signaling in a call session between terminals on two sides of the media gateway (MGW).

Barany also teaches that the MGCF generates SS7 (PS-specific) signaling to the PSTN (para. 0029, ln. 5-6), thus similarly hybrid MGCF can exchange SS7 signaling with radio access network.

Barany also teaches Session Initiation Protocol (SIP) (para. 33, ln. 3) for establishing call session over a packet-switched network such as IP network.

Barany also teaches a media gateway (MGW) (para. 28, ln. 5-7) to convert between circuit-switched signaling and packet-switched signaling.

Barany teaches SIP call control function (para. 36, ln. 6). To establish a packet-switched call/route, SIP is used for call control signaling. It serves as the switching control function (MGCF) that controls a Media Gateway (MGW), as part of the call setup procedure, to route data from media access network to the destination (para. 37, ln. 5-7).

Regarding claim 2, Barany discloses all aspects of the claimed invention set forth in the rejection of claim 1, and Barany further teaches a Mobile Switching Center (MSC) (para. 0098, ln. 15-16) that provides circuit-switched (CS) wireless communications. An MSC proxy, similar to a SIP proxy (para. 0029, ln. 10), can mimic MSC Server functionality.

Regarding claim 3, Barany discloses all aspects of the claimed invention set forth in the rejection of claims 1 and 2, and Barany further teaches an MSC interface (para. 0098, ln. 15-16) linking the MSC to the radio network controller. The radio network controller is the radio handling part for legacy base stations.

Regarding claim 4, Barany discloses all aspects of the claimed invention set forth in the rejection of claims 1 and 2, and Barany further teaches a SIP "proxy" (para. 0029, ln. 10) that mimics the functions of a SIP server.

Regarding claim 5, Barany discloses all aspects of the claimed invention set forth in the rejection of claims 1, 2 and 4, and Barany further teaches (para. 29, ln. 1-3) that a module is present to convert between packet-switched and circuit-switched signaling in a call

session. Circuit-switched signaling protocol is SS7 (para. 29, ln. 5) and packet-switched signaling protocol is SIP (para. 008, ln. 2), as taught by Barany.

Regarding claim 6, Barany discloses all aspects of the claimed invention set forth in the rejection of claims 1, 2, 4 and 5, and Barany further teaches Fig.1 that CSCF accessing multimedia services and applications for a mobile terminal. Barany also teaches that the CSCF is a SIP proxy or server (para. 0029, ln. 9-11) for SIP control signaling.

Regarding claim 7, Barany discloses all aspects of the claimed invention set forth in the rejection of claims 1, 2, 4-6, and Barany further teaches a SIP proxy or server (para. 0029, ln. 10) that handles the packet-layer control signaling with the CSCF module.

Regarding claim 8, Barany discloses all aspects of the claimed invention set forth in the rejection of claims 1, 2, 4 and 5, and Barany further teaches (Fig. 1 prior art) a pair of media gateways (MGW) in the packet-switched domain. One MGW is connected to the radio access network (GERAN/UTRAN), the other MGW is connected to multimedia IP networks. Thus, media payloads have to be routed from the radio access network to the multimedia IP network, via the media gateways.

Regarding claim 9, Barany teaches that the mobile station communicates (para. 36, ln. 1-19) through the radio access network to the 3G network.

Barany also teaches a media gateway (para. 0028, ln. 5-7) that received data from mobile terminals through the radio access network and routes packets to their destination via the packet-switched data network.

Barany also teaches a Call State Control Function (CSCF) (para. 0029, ln. 7-9) that provides access and control for a variety of packet based communication services, including electronic mail, web browsing, file transfer, real-time audio/video and other multimedia services (para. 0027, ln. 2-5).

Barany also teaches that the MGCF generates SS7 (PS-specific) signaling (para. 0029, ln. 4-5) to the PSTN, thus similarly hybrid MGCF can exchange SS7 signaling with radio access network.

Barany also teaches a media gateway (MGW) (para. 0028, ln. 5-7) to convert between circuit-switched signaling and packet-switched signaling. CS signaling is based on the SS7 protocol, and PS-signaling is based on the SIP protocol.

Barany teaches that a SIP proxy or server (para. 0029, ln. 10) provides SIP control signaling to the CSCF, allowing it to perform call setup as part of the multimedia data and control in packet-data networks.

Regarding claim 10, Barany discloses all aspects of the claimed invention set forth in the rejection of claim 9, and Barany further teaches a Mobile Switching Center (MSC) (para. 0098, ln. 15) that provides circuit-switched (CS) wireless communications. An MSC proxy, similar to a SIP proxy (para. 0029, ln. 10), can mimic MSC Server functionality.

Regarding claim 11, Barany discloses all aspects of the claimed invention set forth in the rejection of claims 9 and 10, and Barany further teaches a number of different radio access network protocols, including GSM/EDGE, GERAN and UTRAN. A plurality of base stations, within radio network controller (RNC) serves as legacy base stations associated with each of these RAN air-interfaces (para. 36, ln. 11-15).

Barany further teaches an MSC interface (para. 0098, ln. 15) linking the MSC to the radio network controller. The radio network controller is the radio handling part for legacy base stations.

Regarding claim 12, Barany discloses all aspects of the claimed invention set forth in the rejection of claims 9 and 10, and Barany further teaches a SIP "proxy" (para. 0029, ln. 10) that mimics the functions of a SIP server.

Regarding claim 13, Barany discloses all aspects of the claimed invention set forth in the rejection of claims 9, 10 and 12, and Barany further teaches that a module is present to convert (para. 29, ln. 2) between packet-switched and circuit-switched signaling in a call session. Circuit-switched signaling protocol is SS7 (para. 0029, ln. 5) and packet-switched signaling protocol is SIP (para. 0008, ln. 1), as taught by Barany.

Regarding claim 14, Barany discloses all aspects of the claimed invention set forth in the rejection of claims 9, 10, 12 and 13, and Barany further teaches Fig.1 that CSCF accessing multimedia services and applications for a mobile terminal. Barany also

teaches that the CSCF is a SIP proxy or server (para. 0029, ln. 9-10) for SIP control signaling.

Regarding claim 15, Barany discloses all aspects of the claimed invention set forth in the rejection of claims 9, 10, 12-14, and Barany further teaches a SIP proxy or server (para. 0029, ln. 9-10) that handles the packet-layer control signaling with the CSCF module.

Regarding claim 16, Barany discloses all aspects of the claimed invention set forth in the rejection of claims 9, 10, 12-15, and Barany further teaches that a media gateway control function (MGCF) (para. 0029, ln. 1-4) converts signaling; controls call sessions routed through the media gateway from circuit-switched RAN such as GSM/EDGE, GERAN and UTRAN, to packet-switched network such as Internet Protocol (IP) network (para. 0030, ln. 1-3).

Conclusions

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharif M Shahrier whose telephone number is (703) 305-8707. The examiner can normally be reached on MF: 8:00am - 4:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (703) 305-4798. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SMS


RICKY NGO
PRIMARY EXAMINER